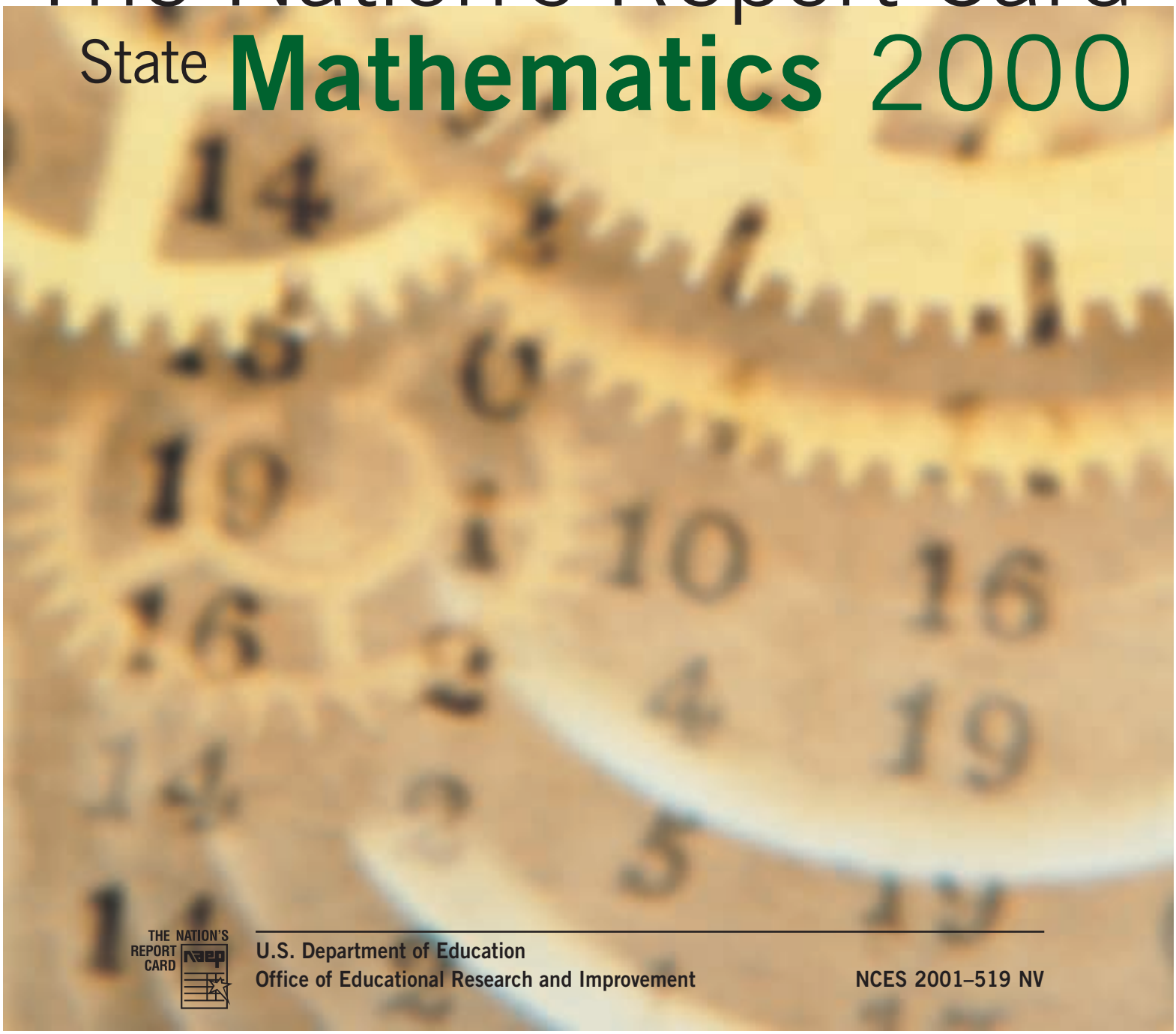
Report for Nevada

Findings from the
National Assessment of Educational Progress

National Center for Education Statistics

The Nation's Report Card

State Mathematics 2000



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State Mathematics 2000

The Nation's Report Card for

Nevada

KEY FINDINGS

For grade 4:

- The average scale score for students in Nevada was 220. This did not differ significantly from the average score in 1996.
- Students' scale scores in Nevada were higher than those in 8 jurisdictions, not significantly different from those in 10 jurisdictions, and lower than those in 27 jurisdictions.
- The percentage of students who performed at or above the *Proficient* level was 16 percent. This did not differ significantly from Nevada's percentage in 1996.

For grade 8:

- The average scale score for students in Nevada was 268.
- Students' scale scores in Nevada were higher than those in 11 jurisdictions, not significantly different from those in 6 jurisdictions, and lower than those in 26 jurisdictions.
- The percentage of students who performed at or above the *Proficient* level was 20 percent.

This report provides selected results from the National Assessment of Educational Progress (NAEP) for Nevada's public school students at grades 4 and 8. Since 1990, mathematics has been assessed in four different years at the state level (at grade 8 in 1990, and at grades 4 and 8 in 1992, 1996, and 2000). Nevada participated only in the 1996 and 2000 assessments and met the criteria for reporting public school results for both grades 4 and 8 in 2000. However, Nevada did not meet the criteria for reporting eighth-grade results in 1996, so only the fourth-grade results for 1996 are presented in this report.

The Nation's Report Card: Mathematics 2000 provides additional results from the assessment. NAEP is a project of the National Center for Education Statistics (NCES).

Contents

The full set of results is available in an interactive database on the NAEP web site, http://www.nces.ed.gov/nationsreportcard. Released test questions and question-level performance data are also available on the web site.

Introduction

What Was Assessed?

The content for each NAEP assessment is developed through a national consensus process directed by the National Assessment Governing Board (NAGB). The consensus process implemented for mathematics required the active participation of teachers, curriculum specialists, subject matter specialists, local school administrators, parents, and members of the general public. The objectives for each NAEP assessment are described in a "framework," a document that delineates the important content and process areas to be measured, as well as the types of questions to be included on the assessment.

The *Mathematics Framework for the 1996 and 2000 National Assessment of Educational Progress* guided the 2000 mathematics assessment. This framework is available on the NAGB web site (http://www.nagb.org/pubs/96-2000math/toc.html). A description of the assessment and previously released test questions are available in *The Nation's Report Card: Mathematics 2000* (available in print and on the NAEP web site, http://nces.ed.gov/nationsreportcard).

The assessment includes short constructed-response questions that ask students to provide the answer for a numerical problem or to briefly describe the solution to a problem. It also includes longer constructed-response questions, which require students to produce both a solution and a short paragraph describing the solution or its interpretation, and a number of questions on which students can use calculators, protractors, or rulers. The 2000 assessment maintained the same five content strands used for previous assessments: number sense, properties and operations; measurement; geometry and spatial sense; data analysis, statistics and probability; and algebra and functions.

Who Was Assessed?

For the NAEP state assessments, a sample of 100 schools and 2500 students is required except in small or sparsely populated jurisdictions. The sample of schools and students is chosen in a two-stage sampling process. First, the sample of schools is selected by probability sampling methods. Then, within the participating schools, simple random samples of students are chosen. These methods are described in *The Nation's Report Card: Mathematics 2000*. The state results and the regional and national results are based on *different* and *separate* samples. That is, the regional and national results are not based on aggregated state assessment data and do not include any students from the U.S. territories.

The overall participation rate for schools and students must meet guidelines established by NCES and NAGB in order for assessment results to be reported publicly. The NAEP state assessment in mathematics was administered to public school students at grade 8 in 1990 and at grades 4 and 8 in 1992, 1996, and 2000.

How Is Student Performance Reported?

The results of student performance on the NAEP assessments are reported for various groups of students (for example, fourth-grade female students or students who took the assessment in different years). The differences in performance between groups of students that are discussed in this report are based on statistical tests that consider both the magnitude of the differences between averages or percentages and the standard error of those statistics. The reader is cautioned to rely on the reported differences, which are statistically significant, in the text and tables rather than on the apparent magnitude of any difference. Statistically significant differences between 2000 and earlier years are marked with a * in the tables. Differences among groups within a year are discussed in the text, but not marked within the tables. Student mathematics performance is described in two ways: 1) average scale scores; and 2) achievement levels.

Scale Scores: Student performance is reported as an average score based on the NAEP mathematics scale, which ranges from 0 to 500 and is linked to its corresponding scale in 1990, 1992, and 1996. The average scale score reflects the overall mathematics performance of a particular group of students.

Achievement Levels: Student mathematics performance is also reported in terms of three achievement levels: *Basic, Proficient,* and *Advanced*. Results based on achievement levels are expressed in terms of the percentage of students who attained each level. The three achievement levels are defined as follows:

- *Basic*: This level denotes partial mastery of prerequisite knowledge and skills that are fundamental for proficient work at each grade.
- *Proficient*: This level represents solid academic performance for each grade assessed. Students reaching this level have demonstrated competency over challenging subject matter, including subject-matter knowledge, application of such knowledge to real-world situations, and analytical skills appropriate to the subject matter.
- *Advanced*: This level signifies superior performance.

The achievement levels are performance standards adopted by NAGB as part of its statutory responsibilities. The levels represent collective judgments of what students should know and be able to do for each grade tested. They are based on recommendations by broadly representative panels of classroom teachers, education specialists, and members of the general public. As provided by law, the Acting Commissioner of Education Statistics, upon review of congressionally mandated evaluations of NAEP, has determined that the achievement levels are to be considered developmental and should be interpreted and used with caution. However, both the Acting Commissioner and NAGB believe these performance standards are useful for understanding student achievement. They have been widely used by national and state officials, including the National Education Goals Panel, as a common yardstick of academic performance.

The results displayed in the *NAEP 2000 Mathematics Report Card* are based on representative national and state samples that include students with disabilities and limited English proficient students. In past assessments, however, no testing accommodations or adaptations were made available to the special-needs students in these samples. To preserve comparability with the samples from 1990, 1992, and 1996, the assessment results for 2000 are based on a sample of students for whom testing accommodations were not permitted. This sample allowed the maintenance of NAEP trend data. In the future, accommodations will be permitted in all NAEP assessments.

In this report, overall scale score and achievement level results are presented first for the sample of students in which testing accommodations were not permitted (trend sample). This sample permits comparisons with past testing years. These results are followed by results for a sample of students in which testing accommodations were permitted. The same is true of the comparisons between states: first are the comparisons based on the sample in which accommodations were not permitted, then results based on the sample in which accommodations were permitted. Mathematics performance disaggregated by demographic characteristics is presented only for the sample in which accommodations were not permitted. Results for the sample in which accommodations were permitted are available on the NAEP web site. For more information, see **Toward a More Inclusive NAEP** beginning on page 36 of this report.

NAEP 2000 Mathematics Overall Scale Score and Achievement Level Results for Public School Students

Overall Scale Score Results

Tables 1A and 1B show the overall performance of public school students in Nevada, the West region, and the nation. Table 1A displays overall performance for 1996 and 2000 for the sample of students in which accommodations were not permitted, whereas table 1B shows overall performance for 2000 for the sample in which accommodations were permitted. In each table, the first column of results presents the average score on the NAEP mathematics scale. The subsequent columns show the average score at selected percentiles. For each percentile, that percentage of scores falls below the score at that percentile.

Grade 4 Scale Score Results: Sample in Which Accommodations Were Not Permitted

- In 2000, the average scale score for students in Nevada was 220. This was lower than that of students across the nation (226).
- In Nevada, the average scale score of students in 2000 did not differ significantly from that of 1996 (218). However, the average scale score for students across the nation in 2000 was higher than that in 1996 (222).

Grade 8 Scale Score Results: Sample in Which Accommodations Were Not Permitted

- In 2000, the average scale score for students in Nevada was 268. This was lower than that of students across the nation (274).

TABLE 1A

The Nation's Report Card 2000 State Assessment

Average mathematics scale scores and selected percentiles for public school students at grades 4 and 8 for the sample in which accommodations were not permitted: 1996 and 2000

		Average scale score	Scale score distribution				
			10th percentile	25th percentile	50th percentile	75th percentile	90th percentile
Grade 4							
2000	Nevada	220 (1.2)	182 (2.7)	202 (2.0)	221 (1.3)	240 (1.4)	256 (1.1)
	West	225 (2.1)	182 (4.5)	204 (3.0)	227 (2.8)	248 (2.2)	265 (3.0)
	Nation	226 (1.0)	185 (1.1)	206 (1.4)	228 (0.9)	249 (1.2)	265 (0.9)
1996	Nevada	218 (1.3)	179 (3.3)	198 (2.6)	219 (1.3)	239 (1.4)	254 (1.4)
	West	219 (2.1)*	177 (4.0)	197 (2.2)	220 (2.9)	240 (2.5)*	259 (2.0)
	Nation	222 (1.0)*	180 (1.7)*	201 (1.3)*	224 (1.1)*	244 (1.3)*	261 (0.8)*
Grade 8							
2000	Nevada	268 (0.9)	223 (1.5)	246 (1.3)	270 (1.0)	293 (1.1)	312 (1.9)
	West	273 (1.6)	223 (3.8)	247 (1.7)	274 (1.3)	300 (2.5)	321 (3.5)
	Nation	274 (0.8)	225 (2.0)	250 (0.9)	276 (0.7)	300 (1.2)	321 (1.2)

NOTE: The NAEP mathematics scale ranges from 0 to 500. The standard errors of the statistics in the table appear in parentheses.
If the notation * appears, it signifies that this value is significantly different from the value for 2000.
*** Sample size is insufficient to permit a reliable estimate.
SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1996 and 2000 Mathematics Assessment.

Grade 4 Scale Score Results: Sample in Which Accommodations Were Permitted

- In 2000, the average scale score for students in Nevada was 220. This was lower than that of students across the nation (225).

Grade 8 Scale Score Results: Sample in Which Accommodations Were Permitted

- In 2000, the average scale score for students in Nevada was 265. This was lower than that of students across the nation (273).

TABLE 1B

The Nation's Report Card 2000 State Assessment

Average mathematics scale scores and selected percentiles for public school students at grades 4 and 8 for the sample in which accommodations were permitted: 2000

		Average scale score	Scale score distribution				
			10th percentile	25th percentile	50th percentile	75th percentile	90th percentile
Grade 4							
2000	Nevada	220 (1.0)	182 (1.4)	201 (1.4)	221 (1.6)	240 (1.0)	256 (0.9)
	West	223 (1.8)	180 (1.3)	200 (2.9)	224 (2.3)	247 (2.5)	265 (2.5)
	Nation	225 (0.8)	184 (1.0)	204 (1.2)	226 (1.0)	247 (1.2)	264 (1.7)
Grade 8							
2000	Nevada	265 (0.8)	217 (3.4)	242 (1.7)	267 (1.3)	292 (0.9)	311 (1.5)
	West	272 (1.5)	222 (3.3)	247 (2.2)	273 (1.2)	299 (1.9)	322 (1.8)
	Nation	273 (0.8)	223 (1.6)	248 (0.8)	275 (1.0)	300 (0.8)	320 (1.3)

NOTE: The NAEP mathematics scale ranges from 0 to 500. The standard errors of the statistics in the table appear in parentheses.
SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2000 Mathematics Assessment.

Overall Achievement Levels Results

Tables 1C and 1D present the percentages of students who performed below *Basic*, at or above *Basic*, at or above *Proficient*, and at the *Advanced* level. Table 1C is based on the sample in which accommodations were not permitted whereas table 1D presents results for the sample in which accommodations were permitted. In each table, because the percentages are cumulative from *Basic* to *Proficient* to *Advanced*, they sum to more than 100 percent. Only the percentage of students at or above *Basic* (which includes the students at *Proficient* and *Advanced*) plus the students below *Basic* will always sum to 100 percent.

Grade 4 Achievement Level Results: Sample in Which Accommodations Were Not Permitted

- In 2000, the percentage of Nevada's students who performed at or above the *Proficient* level was 16 percent. This was smaller than the percentage of the nation's public school students who performed at the same level (25 percent).
- In Nevada, the percentage of students who performed at or above the *Proficient* level in 2000 did not differ significantly from that in 1996 (14 percent).

Grade 8 Achievement Level Results: Sample in Which Accommodations Were Not Permitted

- In 2000, the percentage of Nevada's students who performed at or above the *Proficient* level was 20 percent. This was smaller than the percentage of the nation's public school students who performed at or above *Proficient* (26 percent).

TABLE 1C

The Nation's Report Card 2000 State Assessment

Percentages of public school students attaining achievement levels at grades 4 and 8 for the sample in which accommodations were not permitted: 1996 and 2000

		Below *Basic*	At or Above *Basic*	At or Above *Proficient*	*Advanced*
Grade 4					
2000	Nevada	39 (1.7)	61 (1.7)	16 (1.1)	1 (0.2)
	West	35 (2.5)	65 (2.5)	24 (2.3)	3 (0.5)
	Nation	33 (1.2)	67 (1.2)	25 (1.2)	2 (0.3)
1996	Nevada	43 (1.8)	57 (1.8)	14 (1.2)	1 (0.3)
	West	43 (3.0)*	57 (3.0)*	16 (1.8)*	2 (0.5)
	Nation	38 (1.4)*	62 (1.4)*	20 (1.0)*	2 (0.3)
Grade 8					
2000	Nevada	42 (1.1)	58 (1.1)	20 (0.9)	2 (0.4)
	West	38 (1.6)	62 (1.6)	26 (1.5)	5 (0.7)
	Nation	35 (0.9)	65 (0.9)	26 (1.0)	5 (0.5)

NOTE: The NAEP mathematics scale ranges from 0 to 500. The achievement levels correspond to the following points on the NAEP mathematics scale at grade 4 (and 8): *Basic*, 214–248 (262–298); *Proficient*, 249–281 (299–332); and *Advanced*, 282 (333) and above. The standard errors of the statistics in the table appear in parentheses.
If the notation * appears, it signifies that this value is significantly different from the value for 2000.
*** Sample size is insufficient to permit a reliable estimate.
SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1996 and 2000 Mathematics Assessment.

Grade 4 Achievement Level Results: Sample in Which Accommodations Were Permitted

- In 2000, the percentage of Nevada's students who performed at or above the *Proficient* level was 16 percent. This was smaller than the percentage of the nation's public school students who performed at the same level (23 percent).

Grade 8 Achievement Level Results: Sample in Which Accommodations Were Permitted

- In 2000, the percentage of Nevada's students who performed at or above the *Proficient* level was 18 percent. This was smaller than the percentage of the nation's public school students who performed at the same level (26 percent).

TABLE 1D

The Nation's Report Card 2000 State Assessment

Percentages of public school students attaining achievement levels at grades 4 and 8 for the sample in which accommodations were permitted: 2000

		Below *Basic*	At or Above *Basic*	At or Above *Proficient*	*Advanced*
Grade 4					
2000	Nevada	40 (1.7)	60 (1.7)	16 (0.8)	1 (0.2)
	West	38 (2.6)	62 (2.6)	22 (1.9)	3 (0.6)
	Nation	35 (1.2)	65 (1.2)	23 (1.0)	2 (0.3)
Grade 8					
2000	Nevada	45 (1.3)	55 (1.3)	18 (0.9)	2 (0.4)
	West	38 (1.7)	62 (1.7)	25 (1.6)	5 (0.7)
	Nation	37 (0.9)	63 (0.9)	26 (0.9)	5 (0.4)

NOTE: The NAEP mathematics scale ranges from 0 to 500. The achievement levels correspond to the following points on the NAEP mathematics scale at grade 4 (and 8): *Basic*, 214–248 (262–298); *Proficient*, 249–281 (299–332); and *Advanced*, 282 (333) and above. The standard errors of the statistics in the table appear in parentheses.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2000 Mathematics Assessment.

Comparisons Between Nevada and Other Participating States and Jurisdictions

In 2000, 47 states and other jurisdictions participated in the mathematics assessment. The maps in figures 1A–1D show the participating states and jurisdictions and indicate their membership in four U.S. geographic regions. Note that the U.S. territories and the domestic and overseas Department of Defense Education Activity schools (DoDEA/DDESS and DoDEA/DoDDS) were not placed into any of these regions.

Comparisons by Average Scale Scores

Figures 1A–1D compare Nevada's overall 2000 grade 4 and grade 8 mathematics scale scores with those of all other states and participating jurisdictions. Figures 1A and 1B are based on the sample in which accommodations were not permitted. Figures 1C and 1D are based on the sample in which accommodations were permitted. The different shadings are determined by whether or not Nevada's average scale score is significantly different from that of each of the other participants in the 2000 NAEP mathematics assessment. Note that states that did not participate in 2000, or that did not meet reporting guidelines, are also represented in the maps.

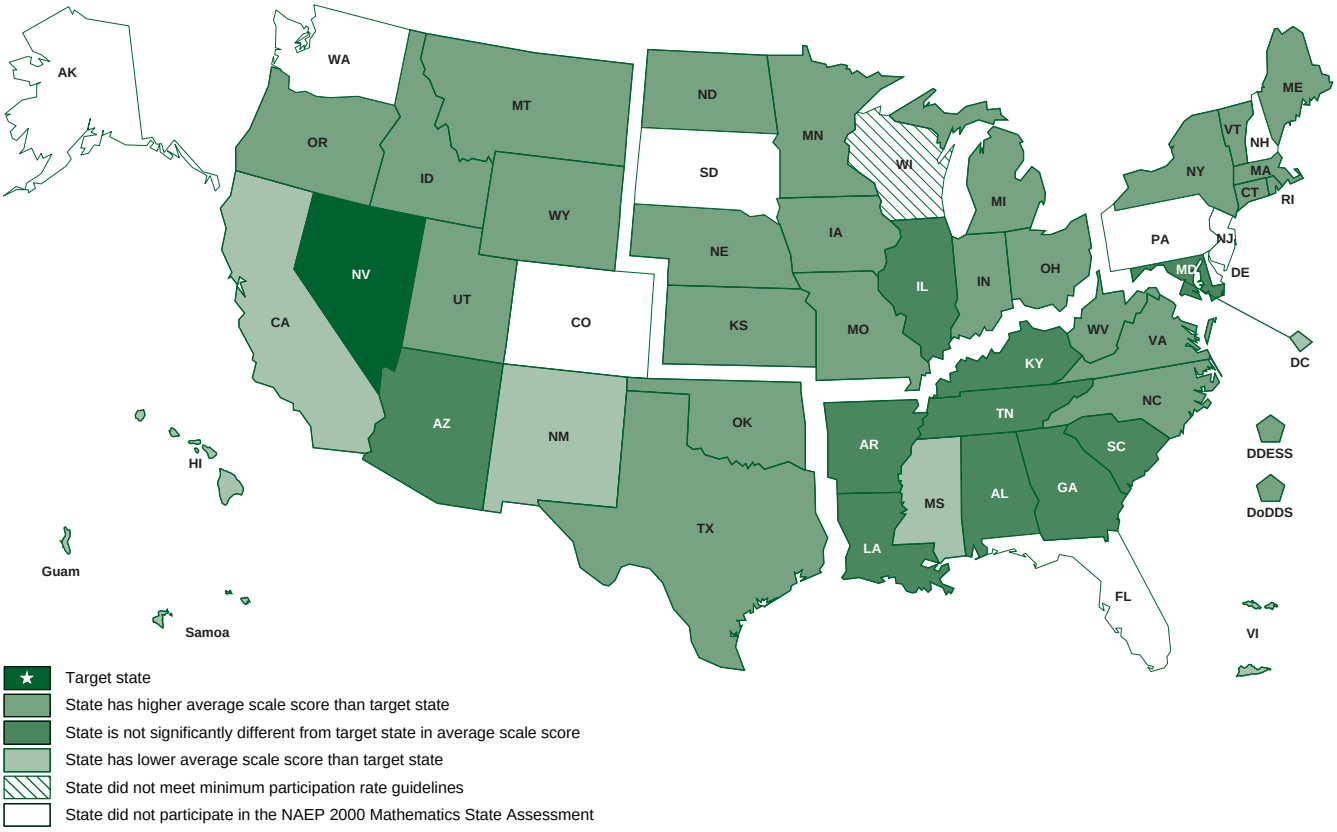
Comparisons by Achievement Levels

Figures 2A–2D permit comparisons of all participants in the NAEP 2000 mathematics assessment in terms of percentages of students performing at or above the *Proficient* level. The participating states and jurisdictions are grouped into categories reflecting student performance compared to that in Nevada. The jurisdictions are grouped by whether the percentage of their students with scores at or above the *Proficient* level (including *Advanced*) was higher than, not significantly different from, or lower than the percentage in Nevada. Note that the arrangement of the states and the other jurisdictions within each category is alphabetical; statistical comparisons among jurisdictions in each of the three categories are not included in this report. Figures 2A and 2B are based on the sample in which accommodations were not permitted. Figures 2C and 2D are based on the sample in which accommodations were permitted.

FIGURE 1A

The Nation's Report Card 2000 State Assessment

Nevada's 2000 average mathematics scale score compared to those for other participating jurisdictions for public school students at grade 4 in the sample in which accommodations were not permitted

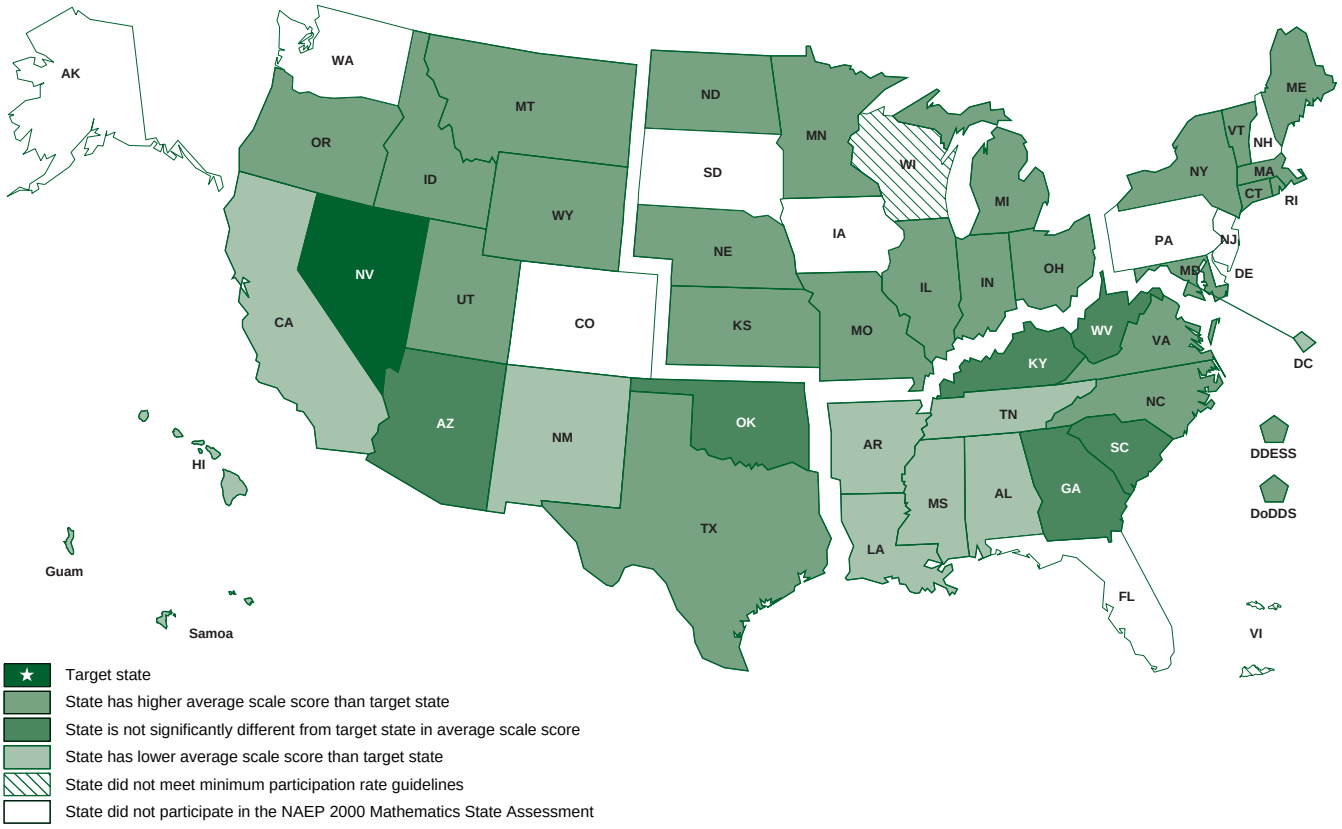


SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2000 Mathematics Assessment.

FIGURE 1B

The Nation's Report Card 2000 State Assessment

Nevada's 2000 average mathematics scale score compared to those for other participating jurisdictions for public school students at grade 8 in the sample in which accommodations were not permitted

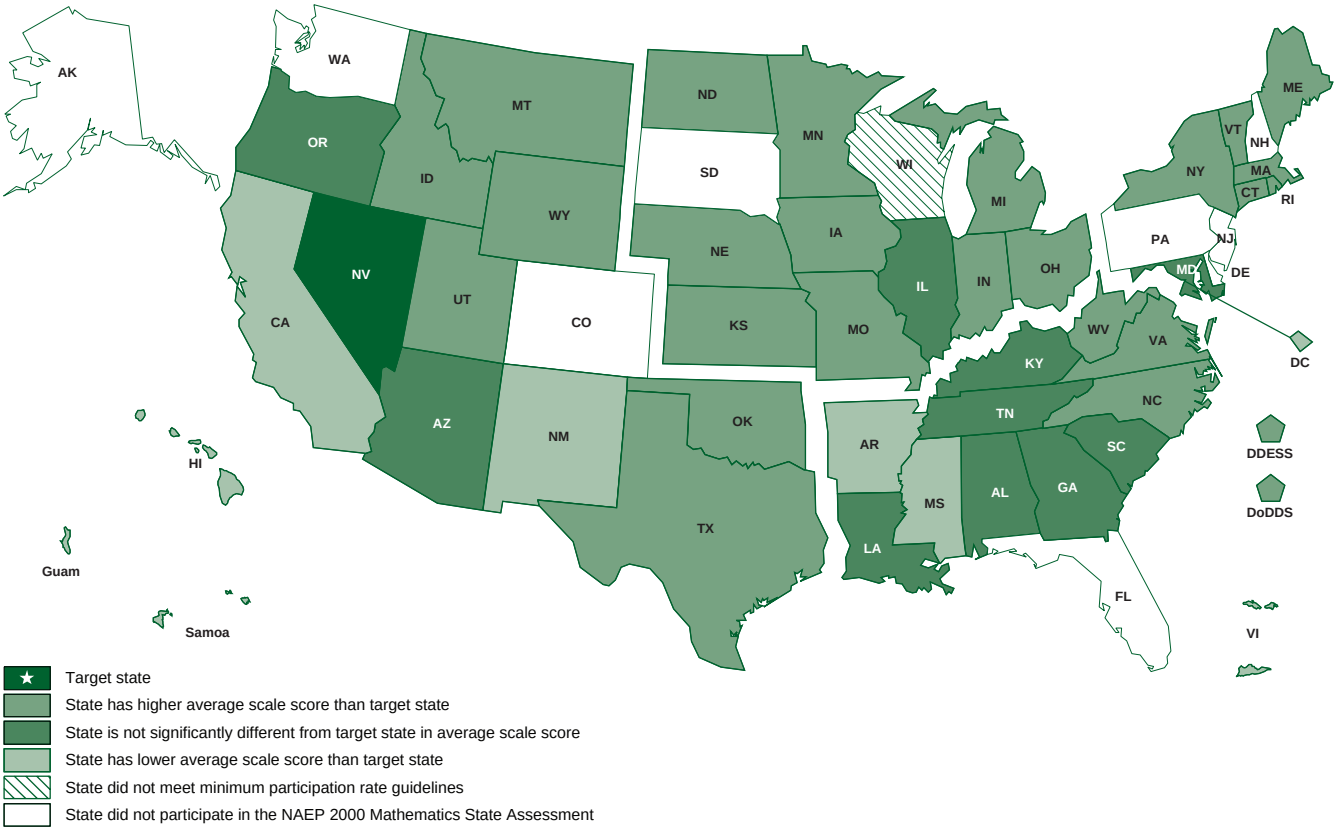


SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2000 Mathematics Assessment.

FIGURE 1C

The Nation's Report Card 2000 State Assessment

Nevada's 2000 average mathematics scale score compared to those for other participating jurisdictions for public school students at grade 4 in the sample in which accommodations were permitted

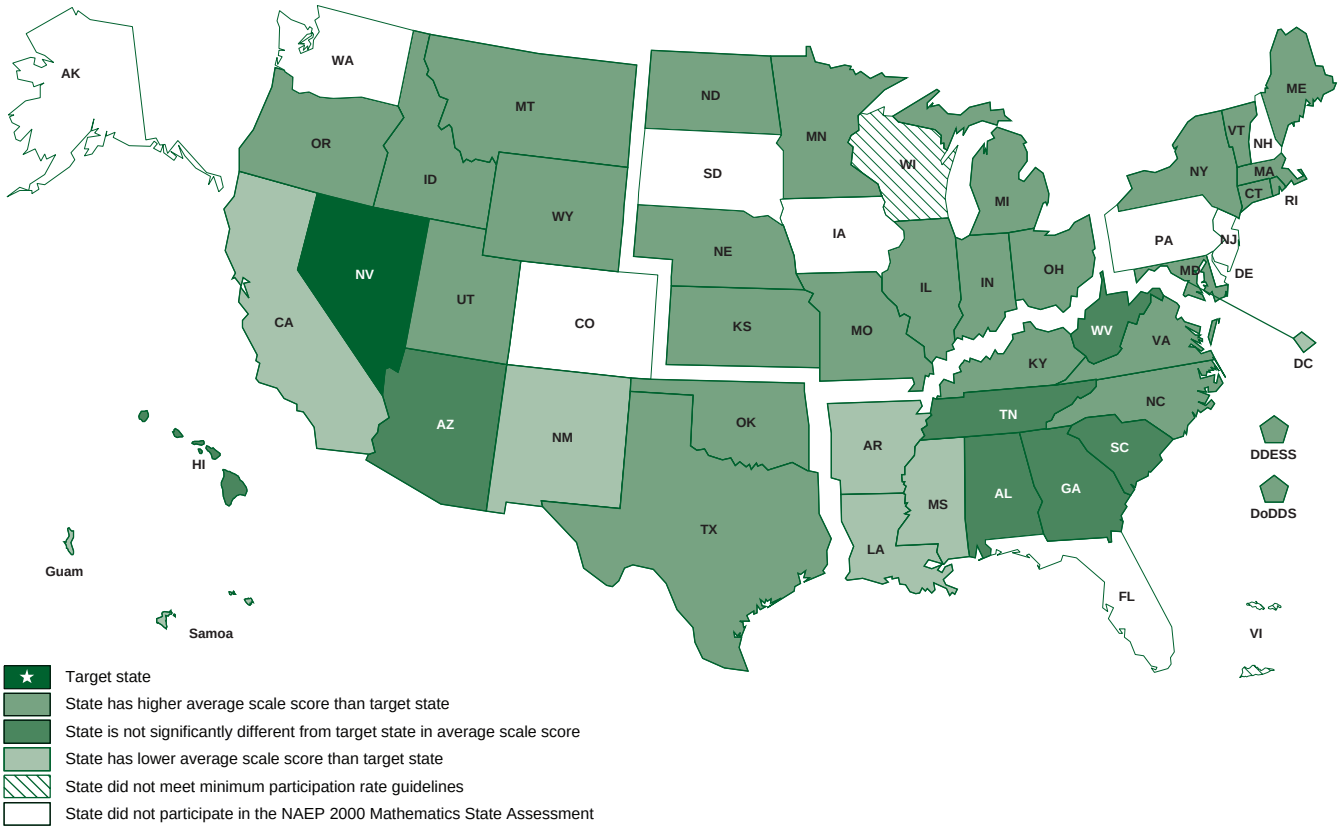


SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2000 Mathematics Assessment.

FIGURE 1D

The Nation's Report Card 2000 State Assessment

Nevada's 2000 average mathematics scale score compared to those for other participating jurisdictions for public school students at grade 8 in the sample in which accommodations were permitted



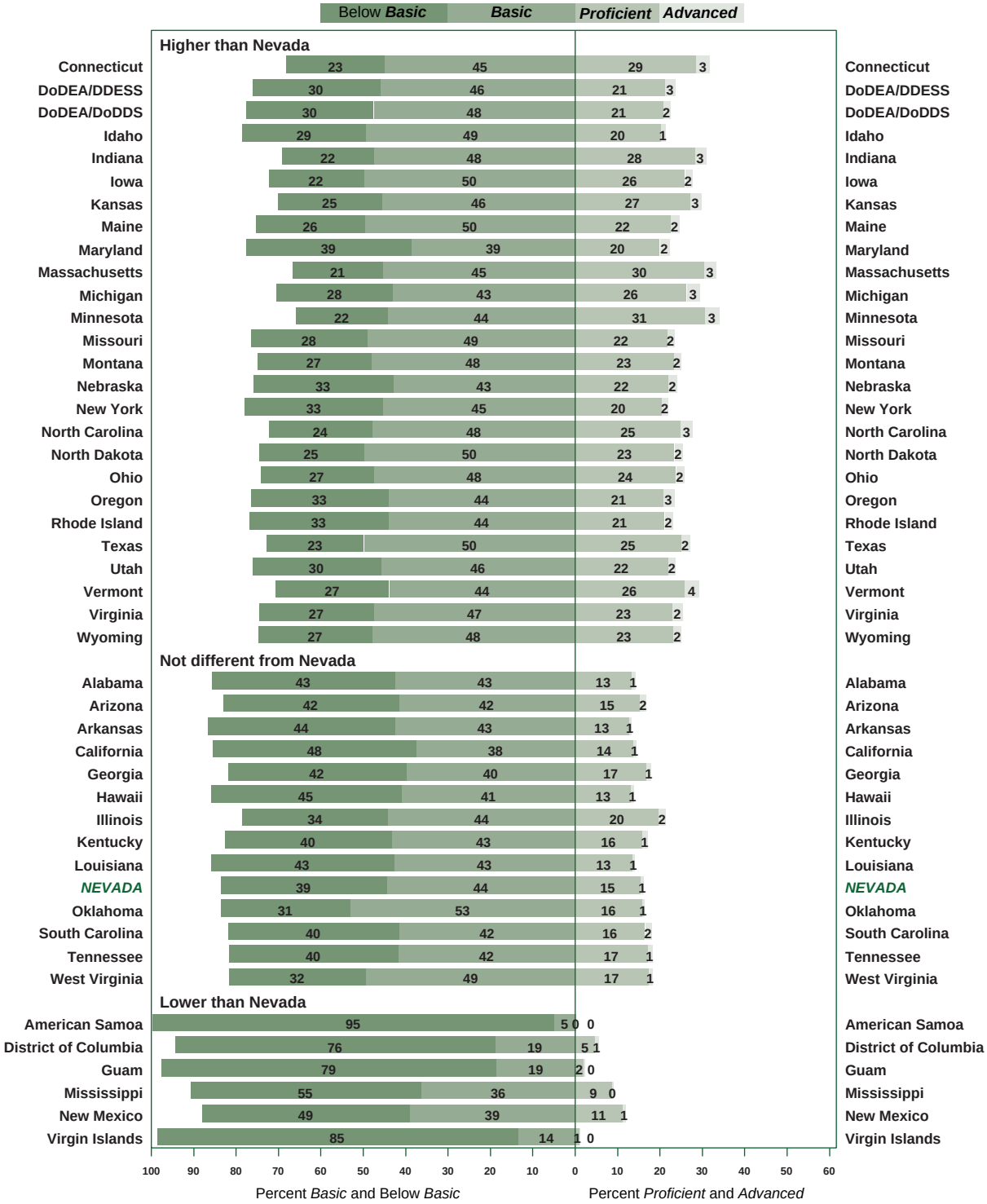
SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2000 Mathematics Assessment.

FIGURE 2A

The Nation's Report Card 2000 State Assessment

The percentage of public school students at or above the Proficient level in Nevada compared with those in other participating jurisdictions at grade 4 in 2000, based on the sample in which accommodations were not permitted

The bars below contain estimated percentages of students in each NAEP mathematics achievement category. Each population of students is aligned at the point where the *Proficient* category begins, so that they may be compared at *Proficient* and above.



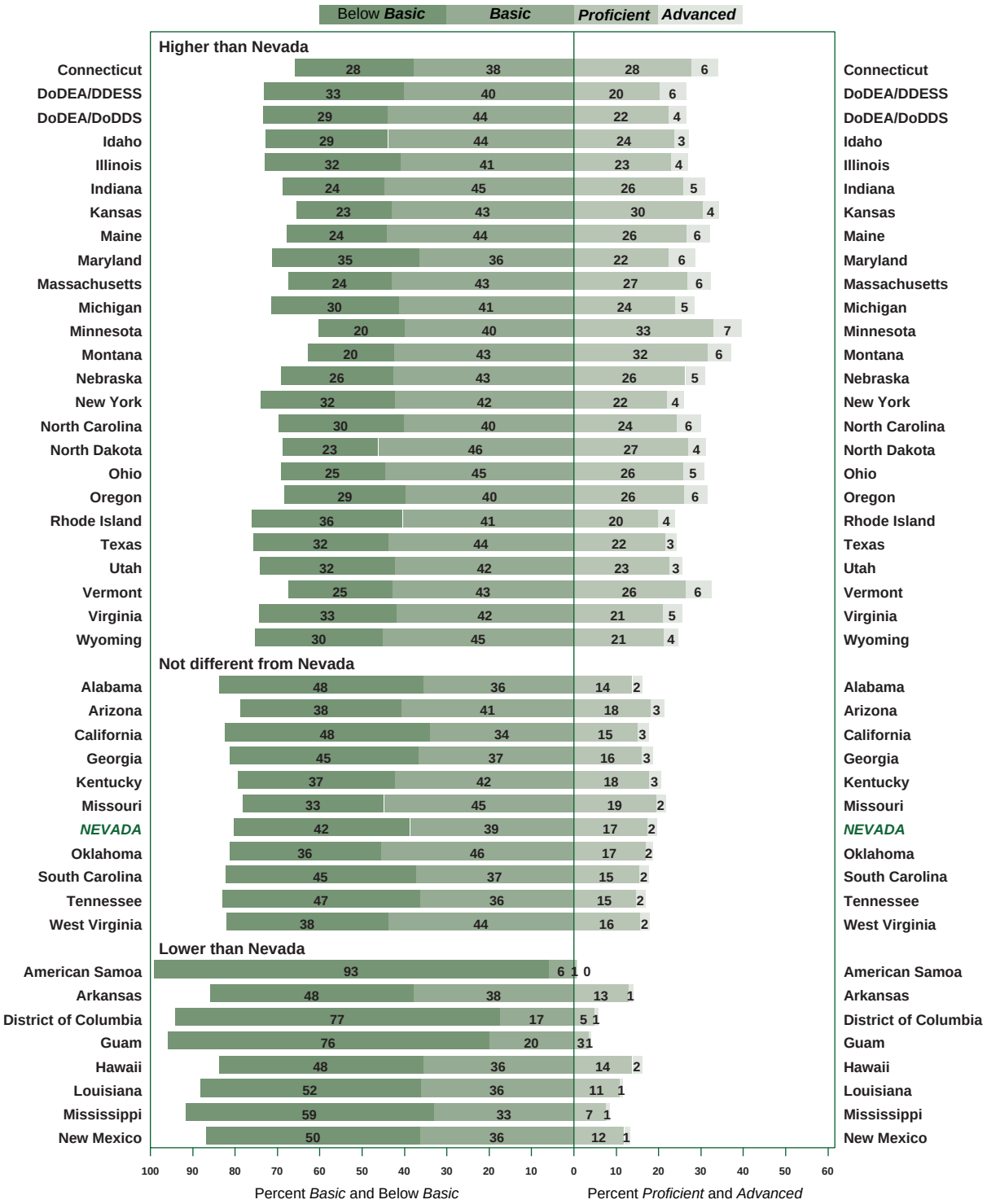
NOTE: Numbers may not add to 100, or to the exact percentage at or above Achievement levels, due to rounding.
SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2000 Mathematics Assessment.

FIGURE 2B

The Nation's Report Card 2000 State Assessment

The percentage of public school students at or above the Proficient level in Nevada compared with those in other participating jurisdictions at grade 8 in 2000, based on the sample in which accommodations were not permitted

The bars below contain estimated percentages of students in each NAEP mathematics achievement category. Each population of students is aligned at the point where the *Proficient* category begins, so that they may be compared at *Proficient* and above.



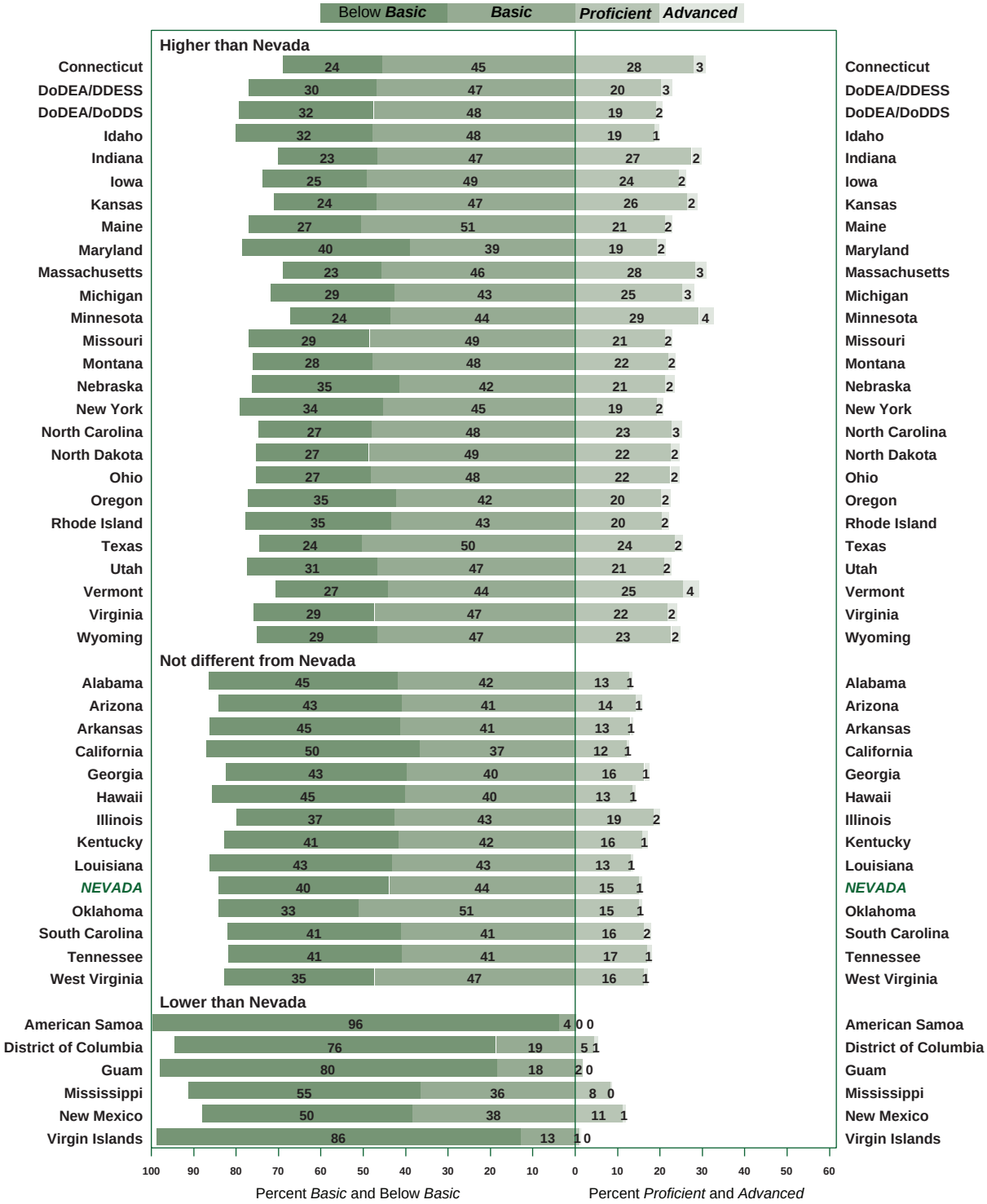
NOTE: Numbers may not add to 100, or to the exact percentage at or above Achievement levels, due to rounding.
SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2000 Mathematics Assessment.

FIGURE 2C

The Nation's Report Card 2000 State Assessment

The percentage of public school students at or above the Proficient level in Nevada compared with those in other participating jurisdictions at grade 4 in 2000, based on the sample in which accommodations were permitted

The bars below contain estimated percentages of students in each NAEP mathematics achievement category. Each population of students is aligned at the point where the *Proficient* category begins, so that they may be compared at *Proficient* and above.



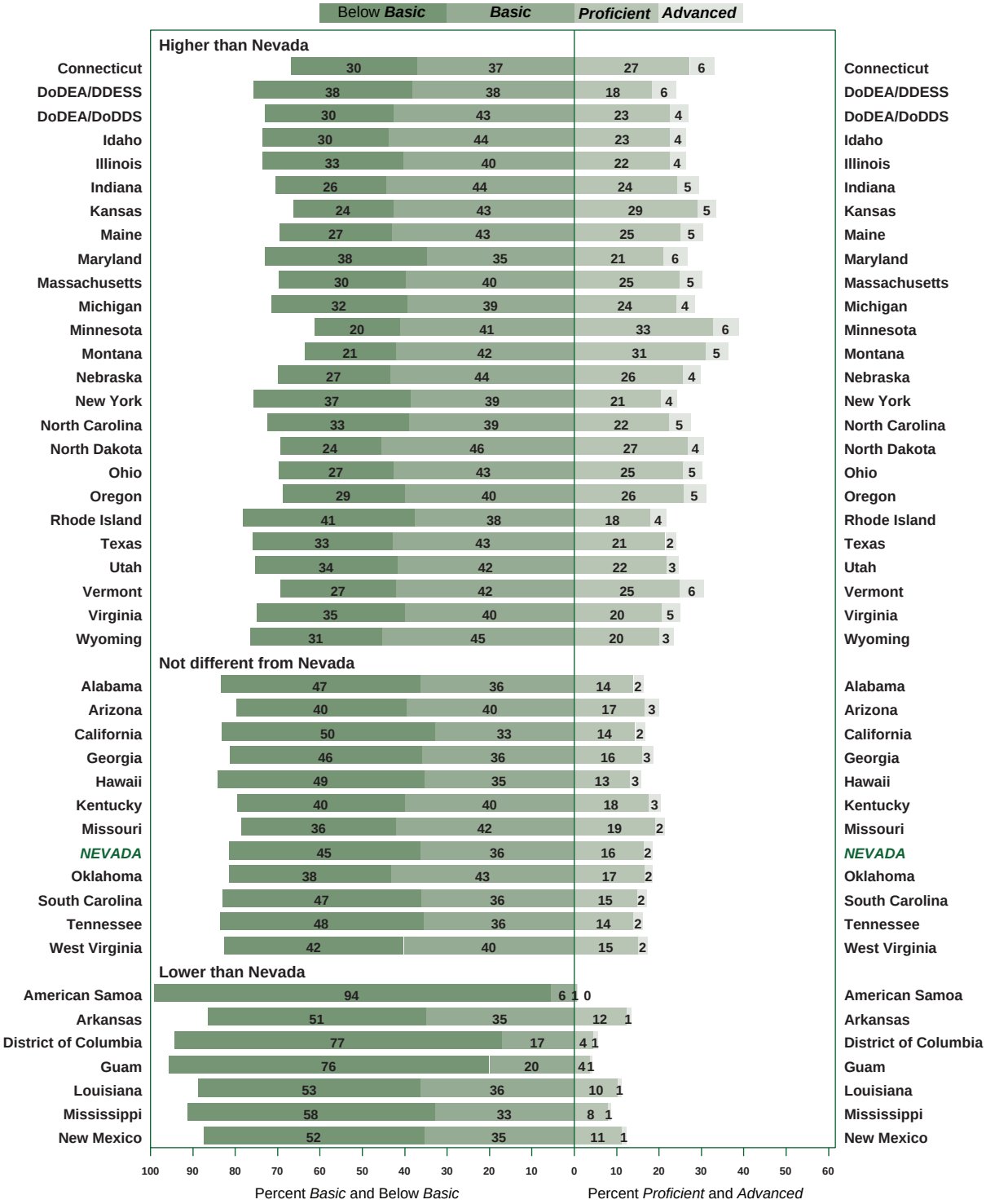
NOTE: Numbers may not add to 100, or to the exact percentage at or above Achievement levels, due to rounding.
SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2000 Mathematics Assessment.

FIGURE 2D

The Nation's Report Card 2000 State Assessment

The percentage of public school students at or above the Proficient level in Nevada compared with those in other participating jurisdictions at grade 8 in 2000, based on the sample in which accommodations were permitted

The bars below contain estimated percentages of students in each NAEP mathematics achievement category. Each population of students is aligned at the point where the *Proficient* category begins, so that they may be compared at *Proficient* and above.



NOTE: Numbers may not add to 100, or to the exact percentage at or above Achievement levels, due to rounding.
SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2000 Mathematics Assessment.

Mathematics Performance by Demographic Characteristics

This section of the report presents trend results by major demographic variables for fourth- and eighth-grade students in Nevada and the nation for the sample in which accommodations were not permitted. In these tables, scale score results and achievement level performance are presented in the same table. Student performance data for the following demographic variables are reported:

- Gender
- Race/ethnicity
- Eligibility for the free/reduced-price school lunch program
- Type of community in which school is located (2000 only)

Each of the variables is reported in tables that present the percentage of students belonging to each subgroup in the first column and the average scale score in the second column. The columns to the right show the percentage of students at or above each achievement level. The reader is cautioned against making causal inferences about the performance of these groups relative to these variables. Many factors other than those discussed here may affect student performance. NAEP collects information on many additional variables including school and home factors related to achievement. All of this information is available in an interactive database on the NAEP web site and can be used to create additional reports of interest to a particular state.

Gender

Tables 2A and 2B show scale scores and achievement level data for public school students at grades 4 and 8 in Nevada and across the nation by gender in the sample in which accommodations were not permitted. The indicators of significant differences that appear in the tables come from a comparison of performance by males or females over time. Differences in performance between males and females are indicated in the comparisons highlighted below, but are not indicated by notations of significance in the tables.

Grade 4 Scale Score Results by Gender: Sample in Which Accommodations Were Not Permitted

- In Nevada, male students' average scale score was 222 in 2000. This was higher than that of female students (218).
- In 2000, male students in Nevada had an average scale score in mathematics (222) that was lower than that of male students across the nation (227). Female students in Nevada had an average score (218) that was lower than that of female students nationwide (225).
- In Nevada, the average scale scores of both males and females were not significantly different in 2000 from those in 1996.

Grade 4 Achievement Level Results by Gender: Sample in Which Accommodations Were Not Permitted

- In 2000, 19 percent of males and 13 percent of females performed at or above the *Proficient* level in Nevada. The difference between these percentages was statistically significant.
- The percentage of males in Nevada's public schools who were at or above the *Proficient* level in 2000 (19 percent) was smaller than that of males in the nation (27 percent).
- The percentage of females in Nevada at or above the *Proficient* level in 2000 (13 percent) was smaller than that of the nation's females (22 percent).
- In Nevada, the percentages of both males and females performing at or above the *Proficient* level were not significantly different in 2000 from those in 1996.

TABLE 2A

The Nation's Report Card 2000 State Assessment

Average mathematics scale scores and achievement level results for public school students by gender at grade 4 for the sample in which accommodations were not permitted: 1996 and 2000

	Percentage of Students	Average Scale Score	Below *Basic*	At or Above *Basic*	At or Above *Proficient*	*Advanced*
Male						
2000 Nevada	51 (1.0)	222 (1.4)	37 (1.8)	63 (1.8)	19 (1.7)	1 (0.4)
Nation	51 (0.7)	227 (1.1)	32 (1.2)	68 (1.2)	27 (1.3)	3 (0.4)
1996 Nevada	50 (1.1)	220 (1.6)	41 (2.4)	59 (2.4)	16 (1.8)	1 (0.5)
Nation	51 (0.7)	224 (1.2)*	37 (1.8)*	63 (1.8)*	22 (1.2)*	3 (0.5)
Female						
2000 Nevada	49 (1.0)	218 (1.3)	41 (2.1)	59 (2.1)	13 (1.4)	1 (0.2)
Nation	49 (0.7)	225 (1.0)	34 (1.4)	66 (1.4)	22 (1.3)	2 (0.4)
1996 Nevada	50 (1.1)	216 (1.6)	45 (2.3)	55 (2.3)	12 (1.1)	0 (0.2)
Nation	49 (0.7)	221 (1.1)*	39 (1.7)*	61 (1.7)*	17 (1.2)*	1 (0.4)

NOTE: The NAEP mathematics scale ranges from 0 to 500. The achievement levels correspond to the following points on the NAEP mathematics scale at grade 4: *Basic*, 214–248; *Proficient*, 249–281; and *Advanced*, 282 and above. The standard errors of the statistics in the table appear in parentheses. If the notation * appears, it signifies that this value is significantly different from the value for 2000.
*** Sample size is insufficient to permit a reliable estimate.
**** Standard error estimates cannot be accurately determined.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1996 and 2000 Mathematics Assessment.

Grade 8 Scale Score Results by Gender: Sample in Which Accommodations Were Not Permitted

- In Nevada, male students' average scale score was 269 in 2000. This did not differ significantly from that of female students (267).
- In 2000, male students in Nevada had an average scale score in mathematics (269) that was lower than that of male students across the nation (276). Female students in Nevada had an average score (267) that was lower than that of female students nationwide (273).

Grade 8 Achievement Level Results by Gender: Sample in Which Accommodations Were Not Permitted

- In 2000, 21 percent of males and 18 percent of females performed at or above the *Proficient* level in Nevada. The difference between these percentages was not statistically significant.
- The percentage of males in Nevada's public schools who were at or above the *Proficient* level in 2000 (21 percent) was smaller than that of males in the nation (29 percent).
- The percentage of females in Nevada at or above the *Proficient* level in 2000 (18 percent) was smaller than that of the nation's females (24 percent).

TABLE 2B

The Nation's Report Card 2000 State Assessment

Average mathematics scale scores and achievement level results for public school students by gender at grade 8 for the sample in which accommodations were not permitted: 2000

	Percentage of Students	Average Scale Score	Below *Basic*	At or Above *Basic*	At or Above *Proficient*	*Advanced*
Male						
2000 Nevada	49 (0.9)	269 (1.2)	41 (1.5)	59 (1.5)	21 (1.5)	3 (0.7)
Nation	50 (0.6)	276 (0.9)	34 (0.9)	66 (0.9)	29 (1.2)	6 (0.6)
Female						
2000 Nevada	51 (0.9)	267 (1.1)	43 (1.3)	57 (1.3)	18 (1.2)	2 (0.4)
Nation	50 (0.6)	273 (1.0)	36 (1.1)	64 (1.1)	24 (1.0)	4 (0.6)

NOTE: The NAEP mathematics scale ranges from 0 to 500. The achievement levels correspond to the following points on the NAEP mathematics scale at grade 8: *Basic*, 262–298; *Proficient*, 299–332; and *Advanced*, 333 and above. The standard errors of the statistics in the table appear in parentheses.
*** Sample size is insufficient to permit a reliable estimate.
**** Standard error estimates cannot be accurately determined.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2000 Mathematics Assessment.

Race/Ethnicity

As part of the background questionnaire administered to students with the assessment, students were asked to identify the racial/ethnic subgroup that best described them. The five mutually exclusive categories were white, black, Hispanic, Asian/Pacific Islander, and American Indian or Alaskan Native. This information was the primary contributor to the classifications appearing below. For details of the derivation of this variable, see *The Nation's Report Card: Mathematics 2000*. Tables 3A and 3B show scale scores and achievement data by racial and ethnic group membership for public school students at grades 4 and 8 in the sample in which accommodations were not permitted. Only the race/ethnicity categories with sufficient membership to meet reporting requirements in Nevada are reported below.

*Grade 4 Scale Score Results by Race/Ethnicity: Sample in Which Accommodations Were Not Permitted**

- In 2000, white students in Nevada had an average scale score that was higher than those of black, Hispanic, and American Indian students, but was not significantly different from that of Asian/Pacific Islander students.
- The average scale scores of white, black, Hispanic, Asian/Pacific Islander, and American Indian students in Nevada did not differ significantly in 2000 from in 1996.

*Grade 4 Achievement Level Results by Race/Ethnicity: Sample in Which Accommodations Were Not Permitted**

- In Nevada in 2000, the percentage of white students performing at or above the *Proficient* level was greater than those of black, Hispanic, and American Indian students, but was not significantly different from that of Asian/Pacific Islander students.
- The respective percentages of white, black, Hispanic, Asian/Pacific Islander, and American Indian students in Nevada performing at or above the *Proficient* level did not differ significantly in 2000 from those in 1996.

* The 2000 national results for fourth-grade Asian/Pacific Islander students are not included in this report. Following a thorough investigation into the quality and credibility of these results, NCES decided to omit these results from this report. See *The Nation's Report Card: Mathematics 2000* for details.

TABLE 3A

The Nation's Report Card 2000 State Assessment

Average mathematics scale scores and achievement level results for public school students by race/ethnicity at grade 4 for the sample in which accommodations were not permitted: 1996 and 2000

	Percentage of Students	Average Scale Score	Below *Basic*	At or Above *Basic*	At or Above *Proficient*	*Advanced*
White						
2000 Nevada	54 (1.8)	228 (1.0)	28 (1.6)	72 (1.6)	23 (1.5)	1 (0.4)
Nation	64 (0.4)	235 (1.1)	22 (1.3)	78 (1.3)	33 (1.6)	3 (0.4)
1996 Nevada	60 (1.4)*	225 (1.2)	33 (2.1)	67 (2.1)	18 (1.5)	1 (0.4)
Nation	66 (0.6)*	231 (1.1)	26 (1.6)	74 (1.6)	26 (1.3)*	3 (0.5)
Black						
2000 Nevada	10 (1.2)	206 (2.5)	60 (4.5)	40 (4.5)	5 (1.5)	0 (****)
Nation	15 (0.2)	205 (1.7)	62 (2.6)	38 (2.6)	5 (0.9)	0 (****)
1996 Nevada	8 (1.1)	196 (3.4)	70 (4.1)	30 (4.1)	2 (1.3)	0 (****)
Nation	15 (0.4)	200 (2.4)	68 (3.4)	32 (3.4)	5 (1.5)	0 (0.1)
Hispanic						
2000 Nevada	27 (1.4)	210 (2.1)	54 (3.2)	46 (3.2)	8 (1.5)	0 (****)
Nation	16 (0.3)	211 (1.6)	53 (2.2)	47 (2.2)	10 (1.5)	1 (0.3)
1996 Nevada	22 (1.0)*	206 (2.1)	60 (3.2)	40 (3.2)	7 (1.2)	0 (****)
Nation	14 (0.4)*	205 (2.2)	60 (2.6)	40 (2.6)	7 (1.0)	0 (****)
Asian/Pacific Islander						
2000 Nevada	6 (0.6)	224 (3.6)	36 (4.6)	64 (4.6)	21 (3.9)	2 (1.6)
1996 Nevada	4 (0.6)	225 (3.5)	36 (7.5)	64 (7.5)	21 (5.7)	1 (****)
Nation	3 (0.2)	231 (4.6)	28 (5.5)	72 (5.5)	24 (6.0)	5 (2.8)
American Indian						
2000 Nevada	3 (0.4)	212 (4.2)	49 (6.8)	51 (6.8)	7 (3.0)	0 (****)
Nation	2 (0.2)	215 (2.3)	49 (6.1)	51 (6.1)	13 (3.0)	1 (****)
1996 Nevada	5 (1.0)	213 (3.1)!	48 (5.3)!	52 (5.3)!	8 (2.9)!	0 (****)!
Nation	2 (0.2)	216 (2.5)	48 (6.1)	52 (6.1)	8 (2.5)	1 (****)

NOTE: The NAEP mathematics scale ranges from 0 to 500. The achievement levels correspond to the following points on the NAEP mathematics scale at grade 4: *Basic*, 214–248; *Proficient*, 249–281; and *Advanced*, 282 and above. The standard errors of the statistics in the table appear in parentheses. If the notation * appears, it signifies that this value is significantly different from the value for 2000.
The 2000 national results for fourth-grade Asian/Pacific Islander students are not included in this report. Following a thorough investigation into the quality and credibility of these results, NCES decided to omit these results from this report. See *The Nation's Report Card: Mathematics 2000* for details.
! Interpret with caution—the nature of the sample does not allow accurate determination of the variability of this statistic.
*** Sample size is insufficient to permit a reliable estimate.
**** Standard error estimates cannot be accurately determined.
SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1996 and 2000 Mathematics Assessment.

Grade 8 Scale Score Results by Race/Ethnicity: Sample in Which Accommodations Were Not Permitted

- In 2000, white students in Nevada had an average scale score that was higher than those of black, Hispanic, and American Indian students, but was not significantly different from that of Asian/Pacific Islander students.

Grade 8 Achievement Level Results by Race/Ethnicity: Sample in Which Accommodations Were Not Permitted

- In Nevada in 2000, the percentage of white students performing at or above the *Proficient* level was greater than those of black, Hispanic, and American Indian students, but was not significantly different from that of Asian/Pacific Islander students.

TABLE 3B

The Nation's Report Card 2000 State Assessment

Average mathematics scale scores and achievement level results for public school students by race/ethnicity at grade 8 for the sample in which accommodations were not permitted: 2000

	Percentage of Students	Average Scale Score	Below *Basic*	At or Above *Basic*	At or Above *Proficient*	*Advanced*
White						
2000 Nevada	56 (0.8)	278 (0.9)	30 (1.5)	70 (1.5)	26 (1.3)	3 (0.5)
Nation	66 (0.5)	285 (0.9)	23 (1.0)	77 (1.0)	34 (1.3)	6 (0.7)
Black						
2000 Nevada	8 (0.5)	251 (2.1)	65 (3.3)	35 (3.3)	7 (2.2)	0 (****)
Nation	14 (0.2)	246 (1.5)	68 (1.9)	32 (1.9)	5 (0.6)	0 (****)
Hispanic						
2000 Nevada	27 (0.9)	251 (2.0)	63 (2.1)	37 (2.1)	9 (1.1)	0 (****)
Nation	15 (0.2)	252 (1.6)	60 (1.9)	40 (1.9)	9 (0.9)	1 (0.3)
Asian/Pacific Islander						
2000 Nevada	7 (0.5)	278 (2.8)	29 (4.5)	71 (4.5)	26 (3.7)	4 (1.9)
Nation	4 (0.4)	288 (3.7)	25 (3.9)	75 (3.9)	40 (4.1)	11 (2.8)
American Indian						
2000 Nevada	2 (0.4)	263 (4.4)	44 (6.9)	56 (6.9)	11 (4.7)	0 (****)
Nation	1 (0.2)	261 (5.6)	50 (8.8)	50 (8.8)	12 (3.6)	0 (****)

NOTE: The NAEP mathematics scale ranges from 0 to 500. The achievement levels correspond to the following points on the NAEP mathematics scale at grade 8: *Basic*, 262–298; *Proficient*, 299–332; and *Advanced*, 333 and above. The standard errors of the statistics in the table appear in parentheses.
! Interpret with caution—the nature of the sample does not allow accurate determination of the variability of this statistic.
*** Sample size is insufficient to permit a reliable estimate.
**** Standard error estimates cannot be accurately determined.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2000 Mathematics Assessment.

Free/Reduced-Price Lunch Program Eligibility

NAEP collects data on eligibility for the federal program providing free or reduced-price school lunches. The free/reduced-price lunch component of the National School Lunch Program (NSLP), offered through the U.S. Department of Agriculture (USDA), is designed to ensure that children near or below the poverty line receive nourishing meals. This program is available to public schools, nonprofit private schools, and residential child care institutions. Eligibility is determined through the USDA's Income Eligibility Guidelines, and results for this category of students are included as an indicator of poverty. NAEP first collected information on participation in this program in 1996. Tables 4A and 4B present results for grades 4 and 8 for the sample in which accommodations were not permitted.

Grade 4 Scale Score Results by Free/Reduced-Price Lunch Program Eligibility: Sample in Which Accommodations Were Not Permitted

- Students in Nevada eligible for the free/reduced-price lunch program had an average mathematics scale score of 208. This was lower than that of students in Nevada not eligible for this program (228).
- In Nevada, students eligible for the free/reduced-price lunch program had an average mathematics scale score in 2000 (208) that did not differ significantly from that of eligible students in 1996 (202).
- Students in Nevada eligible for the free/reduced-price lunch program had an average scale score (208) that did not differ significantly from that of similar students in the nation (210).

Grade 4 Achievement Level Results by Free/Reduced-Price Lunch Program Eligibility: Sample in Which Accommodations Were Not Permitted

- In Nevada, 6 percent of students who were eligible for the free/reduced-price lunch program and 22 percent of those who were not eligible for this program performed at or above the *Proficient* level. These percentages were significantly different.
- In Nevada, the percentage of students who were eligible for the free/reduced-price lunch program who performed at or above the *Proficient* level (6 percent) was not significantly different from the corresponding percentage for 1996 (4 percent).
- For students in Nevada who were eligible for the free/reduced-price lunch program, the percentage at or above the *Proficient* level (6 percent) was not significantly different from the corresponding percentage for their counterparts around the nation (9 percent).

TABLE 4A

The Nation's Report Card 2000 State Assessment

Average mathematics scale scores and achievement level results for public school students by eligibility for the free/reduced-price lunch program at grade 4 for the sample in which accommodations were not permitted: 1996 and 2000

	Percentage of Students	Average Scale Score	Below *Basic*	At or Above *Basic*	At or Above *Proficient*	*Advanced*
Eligible						
2000 Nevada	34 (2.1)	208 (1.6)	57 (2.7)	43 (2.7)	6 (1.1)	0 (****)
Nation	35 (1.1)	210 (1.0)	54 (1.5)	46 (1.5)	9 (0.8)	0 (0.1)
1996 Nevada	15 (2.3)*	202 (2.9)	65 (3.6)	35 (3.6)	4 (1.2)	0 (****)
Nation	34 (1.6)	207 (2.0)	59 (2.6)	41 (2.6)	8 (1.2)	0 (0.3)
Not Eligible						
2000 Nevada	60 (2.4)	228 (1.1)	29 (1.7)	71 (1.7)	22 (1.5)	1 (0.3)
Nation	52 (2.4)	236 (1.3)	21 (1.4)	79 (1.4)	33 (1.6)	4 (0.6)
1996 Nevada	28 (3.6)*	223 (2.3)	36 (2.9)	64 (2.9)	17 (2.7)	1 (0.7)
Nation	52 (2.5)	231 (1.1)*	27 (1.8)*	73 (1.8)*	25 (1.4)*	3 (0.6)
Information Not Available						
2000 Nevada	6 (2.0)	218 (4.9)!	45 (8.6)!	55 (8.6)!	14 (4.4)!	1 (****)!
Nation	13 (2.4)	235 (2.3)	23 (3.3)	77 (3.3)	35 (3.4)	3 (0.9)
1996 Nevada	57 (4.8)*	219 (1.7)	41 (2.6)	59 (2.6)	15 (1.5)	1 (0.3)
Nation	13 (3.1)	230 (4.2)!	28 (5.6)!	72 (5.6)!	28 (5.4)!	3 (1.6)!

NOTE: The NAEP mathematics scale ranges from 0 to 500. The achievement levels correspond to the following points on the NAEP mathematics scale at grade 4: *Basic*, 214–248; *Proficient*, 249–281; and *Advanced*, 282 and above. The standard errors of the statistics in the table appear in parentheses. If the notation * appears, it signifies that this value is significantly different from the value for 2000.
! Interpret with caution—the nature of the sample does not allow accurate determination of the variability of this statistic.
**** Standard error estimates cannot be accurately determined.
SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1996 and 2000 Mathematics Assessments.

Grade 8 Scale Score Results by Free/Reduced-Price Lunch Program Eligibility: Sample in Which Accommodations Were Not Permitted

- Students in Nevada eligible for the free/reduced-price lunch program had an average mathematics scale score of 248. This was lower than that of students in Nevada not eligible for this program (275).
- Students in Nevada eligible for the free/reduced-price lunch program had an average mathematics score (248) that was lower than that of eligible students across the nation (255).

Grade 8 Achievement Level Results by Free/Reduced-Price Lunch Program Eligibility: Sample in Which Accommodations Were Not Permitted

- In Nevada, 6 percent of students who were eligible for the free/reduced-price lunch program and 24 percent of those who were not eligible for this program performed at or above the *Proficient* level. These percentages were significantly different.
- For students who were eligible for the free/reduced-price lunch program in Nevada, the percentage at or above the *Proficient* level (6 percent) was lower than the corresponding percentage of eligible students nationwide (10 percent).

TABLE 4B

The Nation's Report Card 2000 State Assessment

Average mathematics scale scores and achievement level results for public school students by eligibility for the free/reduced-price lunch program at grade 8 for the sample in which accommodations were not permitted: 2000

	Percentage of Students	Average Scale Score	Below *Basic*	At or Above *Basic*	At or Above *Proficient*	*Advanced*
Eligible						
2000 Nevada	26 (0.9)	248 (2.1)	65 (2.6)	35 (2.6)	6 (1.3)	0 (****)
Nation	28 (1.0)	255 (1.2)	56 (1.7)	44 (1.7)	10 (0.9)	1 (0.3)
Not Eligible						
2000 Nevada	71 (0.9)	275 (0.9)	34 (1.4)	66 (1.4)	24 (1.0)	3 (0.5)
Nation	55 (1.8)	285 (1.1)	24 (1.0)	76 (1.0)	35 (1.5)	7 (0.8)
Information Not Available						
2000 Nevada	3 (0.3)	275 (4.2)	35 (5.9)	65 (5.9)	25 (5.3)	5 (2.6)
Nation	16 (2.1)	273 (2.1)	37 (2.7)	63 (2.7)	26 (2.3)	4 (1.0)

NOTE: The NAEP mathematics scale ranges from 0 to 500. The achievement levels correspond to the following points on the NAEP mathematics scale at grade 8: *Basic*, 262–298; *Proficient*, 299–332; and *Advanced*, 333 and above. The standard errors of the statistics in the table appear in parentheses.
! Interpret with caution—the nature of the sample does not allow accurate determination of the variability of this statistic.
**** Standard error estimates cannot be accurately determined.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2000 Mathematics Assessment.

Type of Community in which School is Located

Schools that participated in the assessment were classified into three mutually exclusive types of community in which the school is located: central city, urban fringe/large town, and rural/small town. These categories indicate the geographic locations of schools and are not intended to indicate or imply social or economic meanings for location types. General information (including definitions) about these categories will be available in future technical reports for the 2000 NAEP state assessments. Data are reported for the year 2000 only because between 1996 and 2000, the U.S. Department of Education changed the geographic classifications assigned to a large number of schools. While this has improved the quality of the indicator, it has rendered impossible direct comparisons between 2000 data and earlier years. Table 5A presents fourth- and eighth-grade results according to type of community in Nevada and the nation for 2000 in the sample in which accommodations were not permitted.

Grade 4 Scale Score and Achievement Level Results by Type of Community: Sample in Which Accommodations Were Not Permitted

- In 2000 in Nevada, the average scale score of students attending schools in central cities was not significantly different from those of students in urban fringes/large towns or rural areas/small towns.
- The average scale scores of students attending schools in urban fringes/large towns and rural areas/small towns were lower in Nevada than in similar types of communities nationwide. The average scale score of students in Nevada attending schools in central cities did not differ significantly from that in similar types of communities nationwide.
- In 2000, the percentage of students attending schools in central cities in Nevada who performed at or above the *Proficient* level was not significantly different from the corresponding percentages for students in urban fringes/large towns and rural areas/small towns.
- The respective percentages of students attending schools in urban fringes/large towns and rural areas/small towns who performed at or above the *Proficient* level were smaller in Nevada than in similar types of communities nationwide. The percentage of students attending schools in central cities who performed at or above the *Proficient* level did not differ significantly in Nevada from that in similar types of communities nationwide.

Grade 8 Scale Score and Achievement Level Results by Type of Community: Sample in Which Accommodations Were Not Permitted

- In 2000 in Nevada, the average scale score of students attending schools in central cities was lower than those of students in urban fringes/large towns and rural areas/small towns.
- The average scale score of students attending schools in urban fringes/large towns was lower in Nevada than in similar types of communities nationwide. The average scale score of students in Nevada attending schools in central cities or rural areas/small towns did not differ significantly from that in similar types of communities nationwide.
- In 2000, the percentage of students attending schools in central cities in Nevada who performed at or above the *Proficient* level was not significantly different from the corresponding percentages for students in urban fringes/large towns and rural areas/small towns.
- The percentage of students attending schools in urban fringes/large towns who performed at or above the *Proficient* level was smaller in Nevada than in similar types of communities nationwide. The percentage of students attending schools in central cities or rural areas/small towns who performed at or above the *Proficient* level did not differ significantly in Nevada from that in similar types of communities nationwide.

TABLE 5A

The Nation's Report Card 2000 State Assessment

Average mathematics scale scores and achievement level results for public school students by type of community in which school is located at grades 4 and 8 for the sample in which accommodations were not permitted: 2000

	Percentage of Students	Average Scale Score	Below *Basic*	At or Above *Basic*	At or Above *Proficient*	*Advanced*
Central City						
Grade 4 Nevada	46 (2.3)	218 (1.8)	43 (2.9)	57 (2.9)	14 (1.6)	1 (0.3)
Nation	30 (1.8)	219 (1.9)	42 (2.5)	58 (2.5)	18 (1.8)	1 (0.3)
Grade 8 Nevada	51 (0.9)	265 (1.6)	45 (1.6)	55 (1.6)	18 (1.4)	2 (0.5)
Nation	29 (1.4)	264 (2.2)	47 (2.3)	53 (2.3)	20 (2.1)	4 (0.9)
Urban Fringe/Large Town						
Grade 4 Nevada	40 (2.9)	224 (1.8)	34 (2.7)	66 (2.7)	19 (2.1)	1 (0.4)
Nation	46 (2.4)	231 (1.7)	28 (1.9)	72 (1.9)	30 (1.9)	4 (0.6)
Grade 8 Nevada	33 (1.5)	270 (1.4)	40 (2.0)	60 (2.0)	21 (1.8)	3 (0.7)
Nation	45 (2.2)	279 (1.5)	30 (1.6)	70 (1.6)	30 (1.8)	6 (0.7)
Rural/Small Town						
Grade 4 Nevada	14 (2.3)	218 (3.2)	42 (5.1)	58 (5.1)	14 (2.5)	0 (****)
Nation	25 (2.1)	227 (1.7)	31 (2.6)	69 (2.6)	23 (2.3)	2 (0.5)
Grade 8 Nevada	16 (1.2)	274 (2.3)	34 (3.2)	66 (3.2)	21 (2.5)	2 (1.0)
Nation	26 (2.0)	277 (1.6)	32 (1.6)	68 (1.6)	26 (2.0)	4 (0.9)

NOTE: The NAEP mathematics scale ranges from 0 to 500. The achievement levels correspond to the following points on the NAEP mathematics scale at grade 4 (and 8): *Basic*, 214–248 (262–298); *Proficient*, 249–281 (299–332); and *Advanced*, 282 (333) and above. The standard errors of the statistics in the table appear in parentheses.

**** Standard error estimates cannot be accurately determined.

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2000 Mathematics Assessment.

Toward a More Inclusive NAEP

NAEP endeavors to assess all students selected in the randomized sampling process including students with disabilities (SD) as well as students who are classified by their schools as limited English proficient (LEP). The percentages of students classified as SD or LEP in all participating states and jurisdictions are available in an interactive database at the NAEP web site. It is important to note that school personnel, guided by the student's Individualized Education Program (IEP), make the ultimate decision as to whether or not a particular student should participate in NAEP. Percentages of students excluded from NAEP may vary considerably across states and within a state across years. Comparisons of achievement results across states and within state across years should be interpreted with caution if the exclusion rates vary widely.

The results displayed in the *NAEP 2000 Mathematics Report Card* are based on representative national and state samples that include students with disabilities and limited English proficient students. In past assessments, however, no testing accommodations or adaptations were made available to the special-needs students in these samples. To preserve comparability with the samples from 1990, 1992, and 1996, these assessment results for 2000 are based on a sample of students for whom testing accommodations were not permitted. This sample allowed the maintenance of NAEP trend data.

In the 1996 and 2000 mathematics assessments, however, the NAEP program drew a second, representative national sample of schools. For students in this sample, accommodations were made available. The program has used this split-sample design to study the effects on NAEP results of including special-needs students in the assessments. A series of technical research papers has been published with the results of these comparisons.[1] The *NAEP 2000 Report Card* series is the first to present the results from both the trend reporting sample and the sample of schools in which NAEP offered accommodations to special-needs students who normally receive them in their state assessments.

Also in 2000, the split-sample design was used for the first time in the state assessment of mathematics and science. Both samples included students who were not classified as having special needs and students who were classified as having special needs. In both samples there were special-needs students who took the NAEP mathematics assessment without accommodations. In the sample where accommodations were offered, those special-needs students who normally receive accommodations in their state assessment were allowed to receive them for the NAEP assessment, unless the accommodations were judged to change the construct being measured. It should be noted that accommodated students generally make up a small proportion of the total weighted number of students assessed. For example, in the 2000 national mathematics assessment, accommodated students made up 3 percent of the total weighted number of students assessed.

In the NAEP mathematics assessment, more students were excluded from the sample in which accommodations were not offered in 2000 than in prior years. This may be accounted for in a variety of ways. Among the most far-reaching is the implementation of the Individuals with Disabilities Education Act (IDEA). States that have been diligent in implementing IDEA in their state assessment programs may have higher exclusion rates in the NAEP sample that does not permit accommodations. Local district staff who are accustomed to providing accommodations in state testing situations may have opted for exempting students from the NAEP assessment rather than including them without their customary accommodations. In addition, state population shifts may also account for higher exclusion rates.

As a result, exclusion rates vary considerably within states between the current assessment year and past years. In addition, there is considerable variation in exclusion rates across states. Comparisons of achievement results across states and within states across years should be made with caution, since a comparison within a state across years or between two states may be based on samples with exclusion rates that differ considerably.

[1] Olson, J.F. and Goldstein, A.A. (1997). *The inclusion of students with disabilities and limited English proficient students in large-scale assessments: A summary of recent progress*. (NCES Publication No. 97–482). Washington, DC: National Center for Education Statistics.
Mazzeo, J., Carlson, J.E., Voelkl, K.E., & Lutkus, A.D. (1999). *Increasing the participation of special-needs students in NAEP: A report on 1996 research activities*. (NCES Publication No. 2000–473). Washington, DC: National Center for Education Statistics.

Table 6A shows the percentage of students in Nevada and the nation who were classified as SD or LEP and also the percentages of students who were excluded in the sample in which accommodations were not permitted. Table 6B shows the same information for the sample in which accommodations were permitted.

TABLE 6A

The Nation's Report Card 2000 State Assessment

Percentage of students in Nevada and the nation classified as limited English proficient or as having disabilities in the sample in which accommodations were not permitted: 2000

Percentage of students who are	*Grade 4*		*Grade 8*	
	Nevada	**Nation**	**Nevada**	**Nation**
Classified as LEP	11%	6%	5%	4%
Excluded from the assessment due to LEP	5%	2%	3%	2%
Classified as having a disability	10%	12%	12%	12%
Excluded from the assessment due to disability	6%	6%	8%	6%

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2000 Mathematics Assessment.

TABLE 6B

The Nation's Report Card 2000 State Assessment

Percentage of students in Nevada and the nation classified as limited English proficient or as having disabilities in the sample in which accommodations were permitted: 2000

Percentage of students who are	*Grade 4*		*Grade 8*	
	Nevada	**Nation**	**Nevada**	**Nation**
Classified as LEP	11%	6%	5%	4%
Excluded from the assessment due to LEP	4%	1%	1%	1%
Classified as having a disability	10%	13%	12%	11%
Excluded from the assessment due to disability	3%	3%	3%	4%

SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2000 Mathematics Assessment.

Table 7 presents a comparison between performance within a state on the two samples: the sample in which accomodations were not permitted, and the sample in which accommodations were permitted. This table indicates whether the scale score difference between the two samples is significant.

TABLE 7

The Nation's Report Card 2000 State Assessment

Comparison of average scale scores between the sample in which accommodations were not permitted and the sample in which accommodations were permitted for each jurisdiction participating in the 2000 mathematics assessment

	Grade 4		Grade 8	
	Sample in which accommodations were not permitted	Sample in which accommodations were permitted	Sample in which accommodations were not permitted	Sample in which accommodations were permitted
Alabama	218 (1.4)	217 (1.2)	262 (1.8)	264 (1.8)
Arizona	219 (1.4)	219 (1.3)	271 (1.5)	269 (1.8)
Arkansas	217 (1.1)	216 (1.1)	261 (1.4)	257 (1.5)*
California	214 (1.8)	213 (1.6)	262 (2.0)	260 (2.1)
Connecticut	234 (1.2)	234 (1.1)	282 (1.4)	281 (1.3)
Georgia	220 (1.1)	219 (1.1)	266 (1.3)	265 (1.2)
Hawaii	216 (1.1)	216 (1.0)	263 (1.3)	262 (1.4)
Idaho	227 (1.2)	224 (1.4)*	278 (1.3)	277 (1.0)
Illinois	225 (1.9)	223 (1.9)	277 (1.6)	275 (1.7)
Indiana	234 (1.1)	233 (1.1)	283 (1.5)	281 (1.4)*
Iowa	233 (1.3)	231 (1.2)	--- (--.-)	--- (--.-)
Kansas	232 (1.5)	232 (1.6)	284 (1.4)	283 (1.7)
Kentucky	221 (1.2)	219 (1.4)	272 (1.4)	270 (1.3)*
Louisiana	218 (1.4)	218 (1.4)	259 (1.5)	259 (1.5)
Maine	231 (0.9)	230 (1.0)	284 (1.2)	281 (1.1)*
Maryland	222 (1.3)	222 (1.2)	276 (1.4)	272 (1.7)**
Massachusetts	235 (1.1)	233 (1.2)	283 (1.3)	279 (1.5)**
Michigan	231 (1.4)	229 (1.6)*	278 (1.6)	277 (1.9)
Minnesota	235 (1.3)	234 (1.3)	288 (1.4)	287 (1.4)
Mississippi	211 (1.1)	211 (1.1)	254 (1.3)	254 (1.1)
Missouri	229 (1.2)	228 (1.2)	274 (1.5)	271 (1.5)**
Montana	230 (1.8)	228 (1.7)	287 (1.2)	285 (1.4)
Nebraska	226 (1.7)	225 (1.8)	281 (1.1)	280 (1.2)
Nevada	220 (1.2)	220 (1.0)	268 (0.9)	265 (0.8)**
New Mexico	214 (1.5)	213 (1.5)	260 (1.7)	259 (1.3)
New York	227 (1.3)	225 (1.4)	276 (2.1)	271 (2.2)**
North Carolina	232 (1.0)	230 (1.1)*	280 (1.1)	276 (1.3)**
North Dakota	231 (0.9)	230 (1.2)	283 (1.1)	282 (1.1)
Ohio	231 (1.3)	230 (1.5)	283 (1.5)	281 (1.6)*
Oklahoma	225 (1.3)	224 (1.0)	272 (1.5)	270 (1.3)
Oregon	227 (1.6)	224 (1.8)*	281 (1.7)	280 (1.5)
Rhode Island	225 (1.2)	224 (1.1)	273 (1.1)	269 (1.3)*
South Carolina	220 (1.4)	220 (1.4)	266 (1.4)	265 (1.5)
Tennessee	220 (1.5)	220 (1.4)	263 (1.7)	262 (1.5)
Texas	233 (1.2)	231 (1.1)	275 (1.5)	273 (1.6)
Utah	227 (1.2)	227 (1.3)	275 (1.2)	274 (1.2)*
Vermont	232 (1.6)	232 (1.6)	283 (1.1)	281 (1.5)
Virginia	230 (1.3)	230 (1.0)	277 (1.5)	275 (1.3)
West Virginia	225 (1.2)	223 (1.3)	271 (1.0)	266 (1.2)**
Wyoming	229 (1.3)	229 (1.1)	277 (1.2)	276 (1.0)
American Samoa	157 (3.9)	152 (2.5)	195 (4.5)	192 (5.5)
District of Columbia	193 (1.2)	192 (1.1)	234 (2.2)	235 (1.1)
DDESS	228 (1.2)	228 (1.4)	277 (2.3)	274 (1.8)
DoDDS	228 (0.7)	226 (0.9)	278 (1.0)	278 (1.1)
Guam	184 (2.3)	184 (1.7)	233 (2.2)	234 (2.6)
Virgin Islands	183 (2.8)	181 (1.8)	--- (--.-)	--- (--.-)

NOTE: The NAEP mathematics scale ranges from 0 to 500. The standard errors of the statistics in the table appear in parentheses.
* Indicates that the average scale score for the sample in which accommodations were permitted was significantly different from the average scale score for the sample in which accommodations were not permitted if only one jurisdiction is being examined.
** Indicates that the average scale score for the sample in which accommodations were permitted was significantly different from the average scale score for the sample in which accommodations were not permitted using a multiple comparison procedure based on all jurisdictions that participated.
--- Iowa did not participate at grade 8. Virgin Islands failed to meet participation guidelines to report results at grade 8.
SOURCE: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2000 Mathematics Assessment.

Where to Find More Information

The NAEP Mathematics Assessment

The latest news about the NAEP 2000 mathematics assessment and the results of the assessment can be found on the mathematics page of the NAEP web site at http://nces.ed.gov/nationsreportcard/mathematics/. Information about the assessment and interpretation of results is also available in *The Nation's Report Card: Mathematics 2000*. Both that report and the *NAEP 2000 State Reports* are available on the NAEP web site, http://nces.ed.gov/nationsreportcard. *The Mathematics Framework for the National Assessment of Educational Progress,* on which the assessment is based, is available at http://www.nagb.org/.

Participation in 2000

Information on each jurisdiction's participation rates for schools and students can be found in *The Nation's Report Card: Mathematics 2000*.

Additional Results from the Mathematics Assessment

For more findings from the 2000 mathematics assessments, refer to the NAEP 2000 results at http://nces.ed.gov/nationsreportcard/tables/. The interactive database at this site will include student and school variables for all jurisdictions, the nation, and the four NAEP geographic regions. Data tables will also be available for each jurisdiction, with all background questions cross-tabulated with the major demographic variables.

Publications on the inclusion of students with disabilities and limited English proficient students

Olson, J.F. and Goldstein, A.A. (1997). *The inclusion of students with disabilities and limited English proficient students in large-scale assessments: A summary of recent progress*. (NCES Publication No. 97–482). Washington, DC: National Center for Education Statistics.

Mazzeo, J., Carlson, J.E., Voelkl, K.E., & Lutkus, A.D. (1999). *Increasing the participation of special-needs students in NAEP: A report on 1996 research activities*. (NCES Publication No. 2000–473). Washington, DC: National Center for Education Statistics.

To Order Publications

Recent NAEP publications related to mathematics are listed on the mathematics page of the NAEP web site and are available electronically. Publications can be also be ordered from:

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The *2000 Mathematics State Reports* in this series were prepared by Charlotte Solomon, Laura Jerry, and Anthony Lutkus of Educational Testing Service.

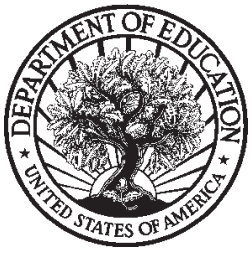
What is The Nation's Report Card?

THE NATION'S REPORT CARD, the National Assessment of Educational Progress (NAEP), is the only nationally representative and continuing assessment of what America's students know and can do in various subject areas. Since 1969, assessments have been conducted periodically in reading, mathematics, science, writing, history, geography, and other fields. By making objective information on student performance available to policymakers at the national, state, and local levels, NAEP is an integral part of our nation's evaluation of the condition and progress of education. Only information related to academic achievement is collected under this program. NAEP guarantees the privacy of individual students and their families.

NAEP is a congressionally mandated project of the National Center for Education Statistics, the U.S. Department of Education. The Commissioner of Education Statistics is responsible, by law, for carrying out the NAEP project through competitive awards to qualified organizations. NAEP reports directly to the Commissioner, who is also responsible for providing continuing reviews, including validation studies and solicitation of public comment, on NAEP's conduct and usefulness.

In 1988, Congress established the National Assessment Governing Board (NAGB) to formulate policy guidelines for NAEP. The Board is responsible for selecting the subject areas to be assessed from among those included in the National Education Goals; for setting appropriate student performance levels; for developing assessment objectives and test specifications through a national consensus approach; for designing the assessment methodology; for developing guidelines for reporting and disseminating NAEP results; for developing standards and procedures for interstate, regional, and national comparisons; for determining the appropriateness of test items and ensuring they are free from bias; and for taking actions to improve the form and use of the National Assessment.

The National Assessment Governing Board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